

HOLLOW METAL DOORS and FRAMES

Minnesota

TRUSSBILT

custom doors

contents	page
TRUSSBILT Construction	2
Custom Doors	
construction	2-3
features	3
oversized doors	3
types	4
details	4-5
specifications	8
Hollow Metal Frames	
frame details	6-7
casings	6
moulds	6
scribes	6
specifications	9
base and anchor details	8
Stock Doors	10-11
U/L Hollow Metal Doors and Frames	12-13
Trusscore Prison and Detention Doors	
types	14
door details	15
frames	16
relite frames	17
specifications	16-17
Glass Window Walls with HM Panels	18-19
Representatives	20

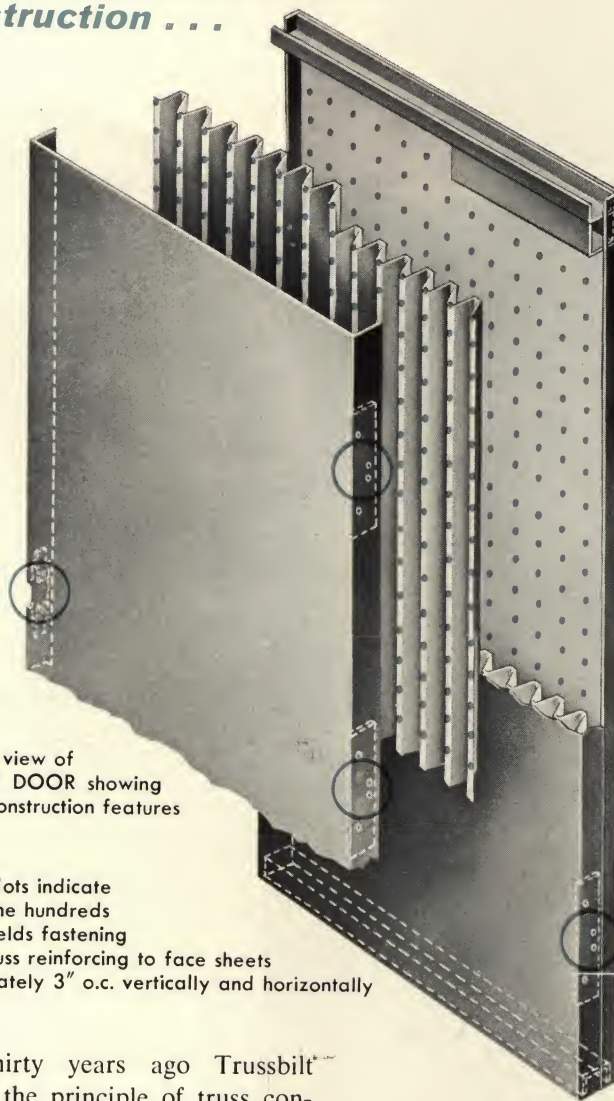
Note:

Bullet-proof Doors
Although not detailed or described in this catalog, TRUSSBILT does design and fabricate Bullet-proof Doors to meet the most exacting individual requirements. Write us for information.



THIS TRADEMARK IS A
GUARANTEE OF QUALITY

TRUSSBILT superior flush door construction . . .



exploded view of
TRUSSBILT DOOR showing
superior construction features

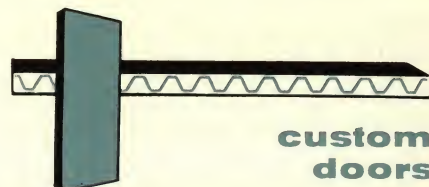
Note:

Colored dots indicate
some of the hundreds
of spot welds fastening
interior truss reinforcing to face sheets
approximately 3" o.c. vertically and horizontally

Over thirty years ago Trussbilt[®] adapted the principle of truss construction to the manufacture of hollow metal doors. Using specially designed assembly and welding equipment an entirely new method of hollow metal construction was developed which produced a door of unusual strength, rigidity and flatness.

Trussbilt flush steel doors are also desirable for their fine appearance and fire resistance. Suitable for the finest hotels and apartments as well as office buildings, schools, hospitals, prisons and commercial buildings.

Trussbilt's extensive modern facilities make possible the fabrication of a complete line of hollow metal doors, frames, trim and window walls.



**custom
doors**

features

- ▶ Over thirty years, of proven quality, in the custom-built hollow metal door industry.
- ▶ Hollow metal construction with extreme rigidity.
- ▶ Patented continuous "Trusscore" construction.
- ▶ Face sheets spotwelded to core 3" on center both vertically and horizontally. No weld marks.
- ▶ Every door provided with heavy channel check reinforcement.
- ▶ Extra heavy $\frac{3}{16}$ " steel butt and lock front reinforcements.
- ▶ Completely painted inside and out with a baked-on primer.
- ▶ Complete selection of baked enamel finishes available.

oversized doors

"TRUSSCORE" RIGIDITY ADAPTED TO OVERSIZE DOORS

"Trusscore" construction is not confined to the standard size door. This rigid construction, along with formed channel reinforcements, offers the architect and contractor custom built doors of very large size that can be made of 16

or 14 gauge steel less than 2" thick. Doors can be furnished in pairs: two-fold or four-fold, as may be required. All doors are custom built permitting a wide variety of features to be incorporated, such as pilot doors, access doors, or cut-outs for Mono-rails, pipes, etc.

Oversize doors are to be hung in structural iron frames.



A pair of flush doors with pilot door, opening size of 10'-7" x 10'-0", at Trussbilt factory

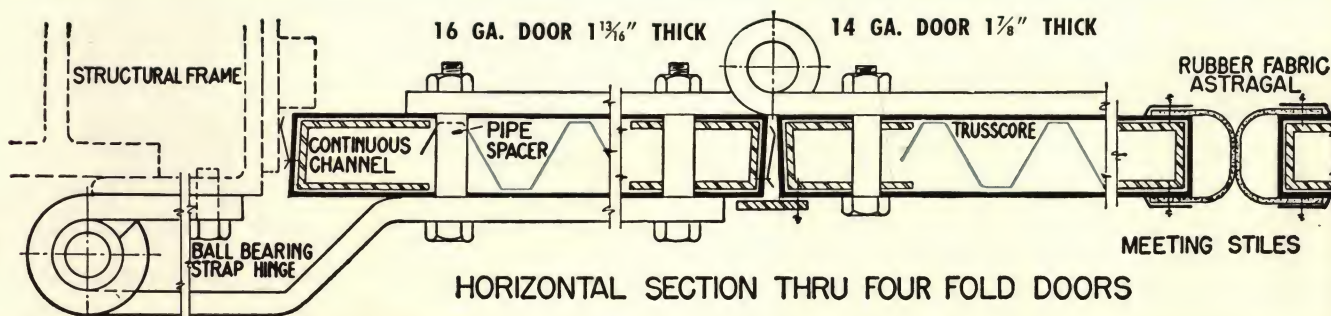


Four-fold flush doors with an opening size of 20'-0" x 22'-0" at the Northern States Power Co.

hardware

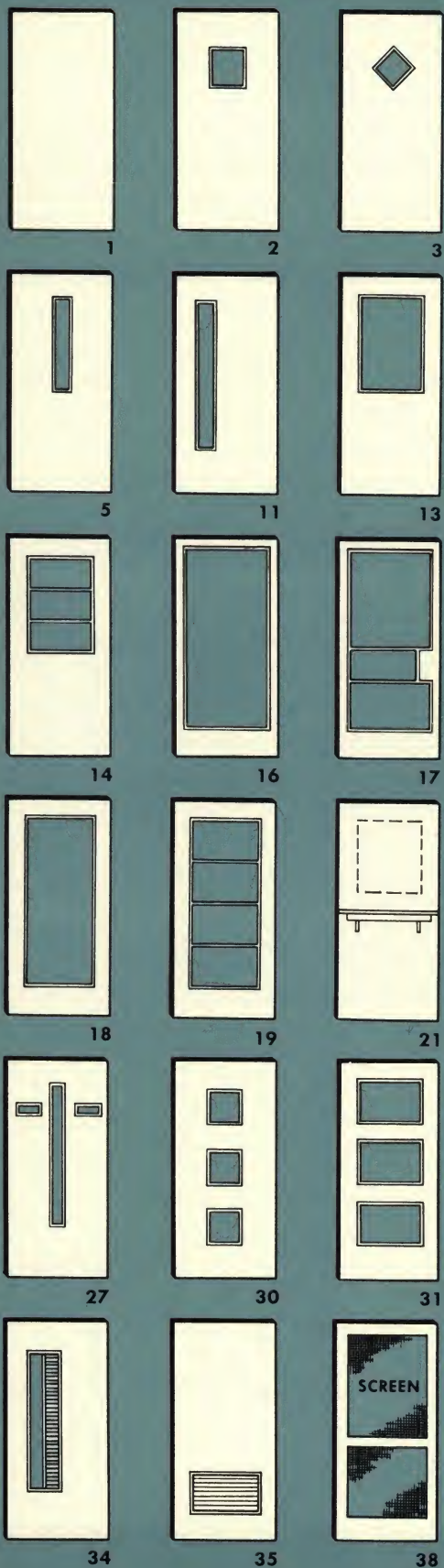
It is recommended that the door manufacturer provide the necessary hardware and power operators where required, and suggest you write for particulars.

We offer you our many years of experience and our Engineering staff is at your service.



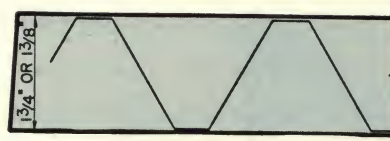
TRUSSBILT

door types

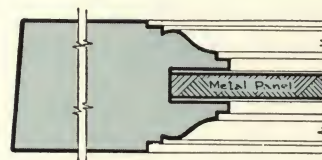


custom doors

panel details



FLUSH TRUSS CORE DOORS



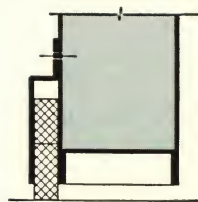
METAL PANEL DOORS

meeting stiles

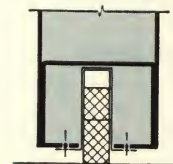


PARALLEL MEETING STILES

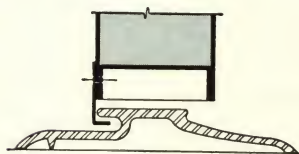
door bottoms



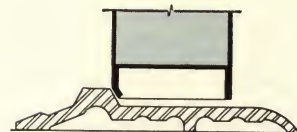
SURFACE TYPE
AUTOMATIC DOOR BOTTOM



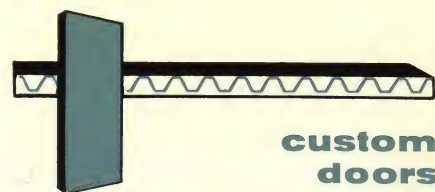
MORTISE TYPE
AUTOMATIC DOOR BOTTOM



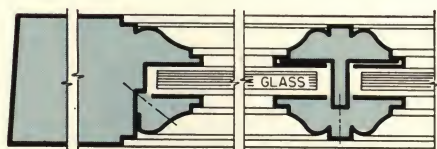
WEATHERSTRIP THRESHOLD



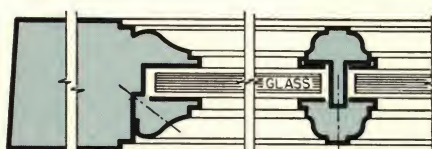
PANIC DEVICE THRESHOLD



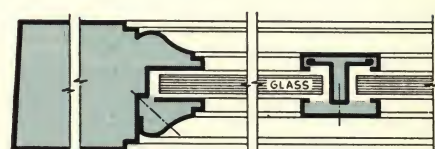
custom
doors



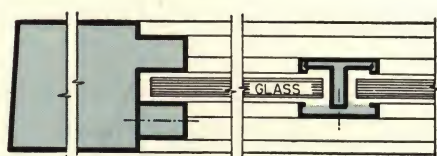
TYPE 10 GLASS PANEL DOORS



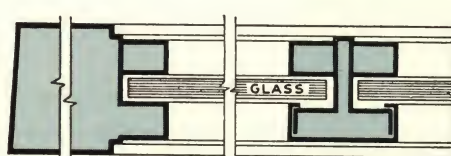
TYPE 20 GLASS PANEL DOORS



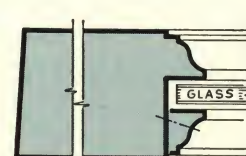
TYPE 30 GLASS PANEL DOORS



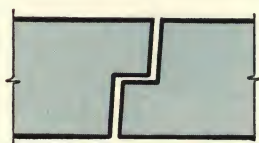
TYPE 40 GLASS PANEL DOORS



TYPE 50 GLASS PANEL DOORS



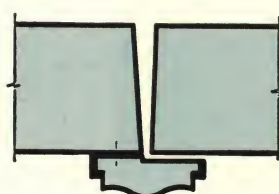
VISION PANEL



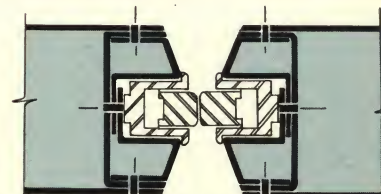
RABBETED MEETING STILES



DOUBLE ACTING MEETING STILES



"V" BEVEL MEETING STILES

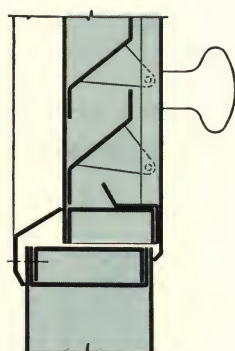


MICHAELS TYPE "E" ASTRAGAL

door louvers



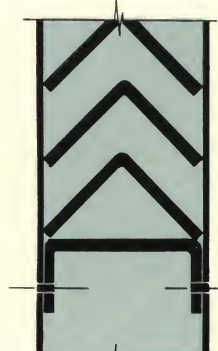
AIROLITE NO. 520®
FIXED LOUVER



AIROLITE NO. 643®
ADJUSTABLE LOUVER



AIROLITE NO. 619®
LIGHTPROOF LOUVER



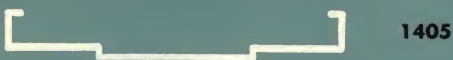
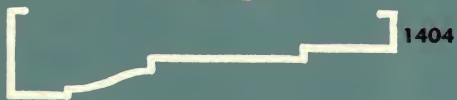
12 GAUGE LOUVER

TRUSSBILT

cold drawn moulds

1/2 full size

casings

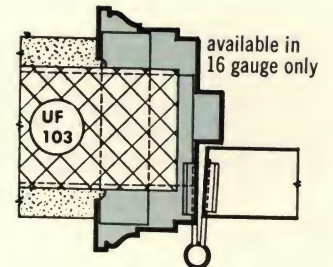
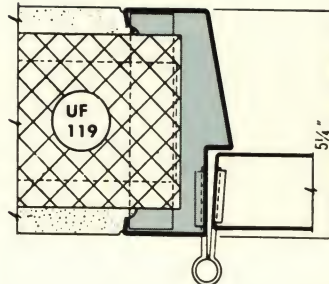


scribes

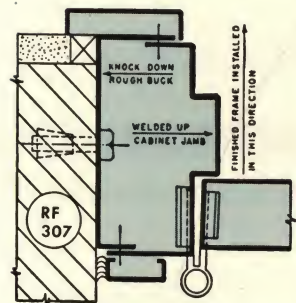
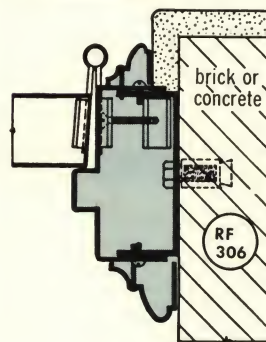
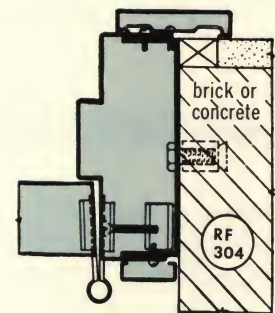
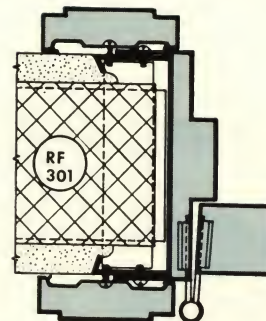


door frames and transom bars

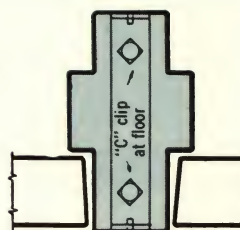
typical frame details



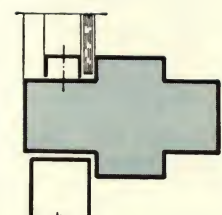
rough buck and cabinet jambs



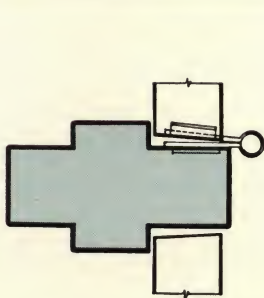
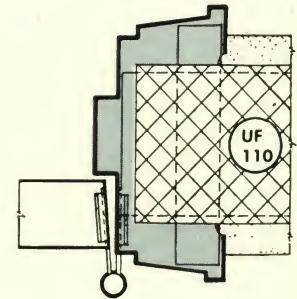
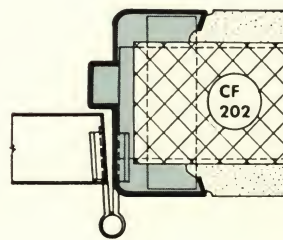
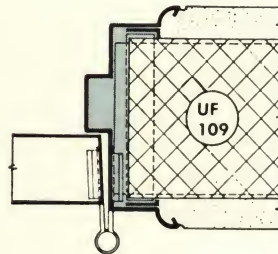
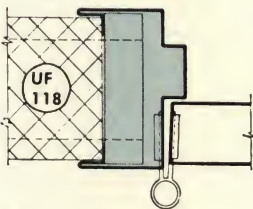
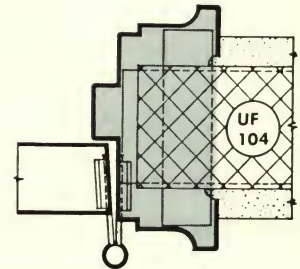
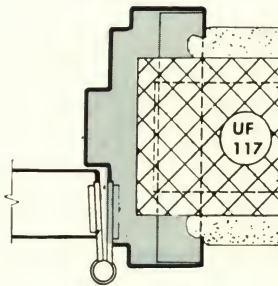
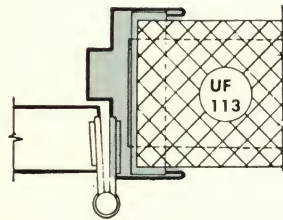
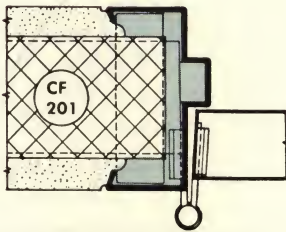
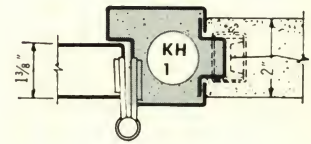
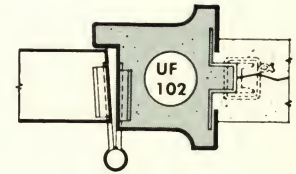
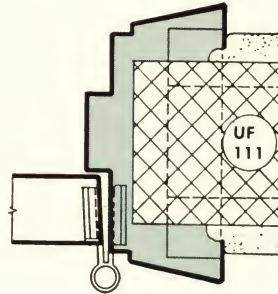
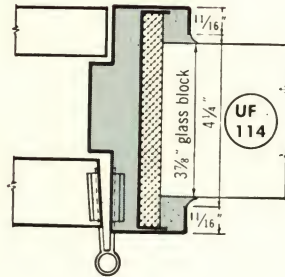
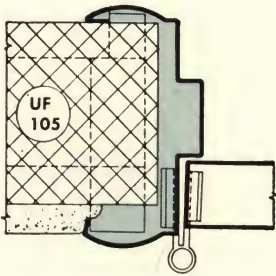
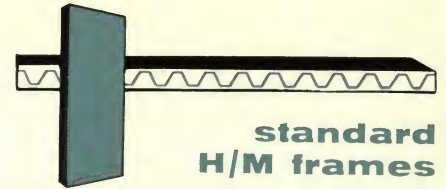
mullions and transom bars



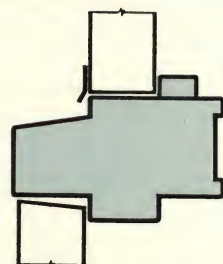
MULLION



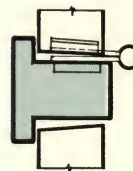
TRANSOM BAR NO. TR 402



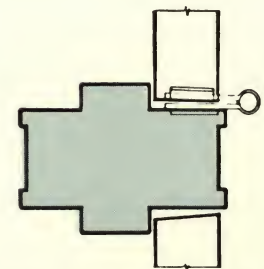
TRANSOM BAR NO. TR 403



TRANSOM BAR FOR EXTERIOR
UNIT WITH STATIONARY SASH
TRANSOM BAR NO. TR 405



TRANSOM BAR NO. TR 401

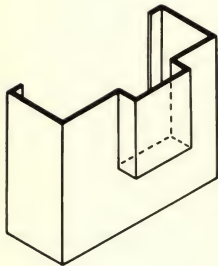


TRANSOM BAR NO. TR 404

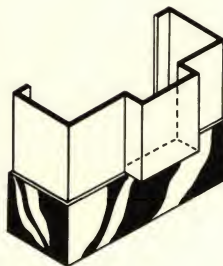
TRUSSBILT

hollow metal custom doors & frames

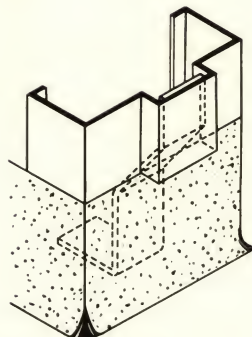
base and anchor details



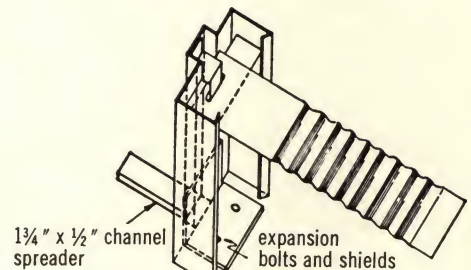
JAMB EXTENDS
TO OR BELOW
FINISH FLOOR LINE



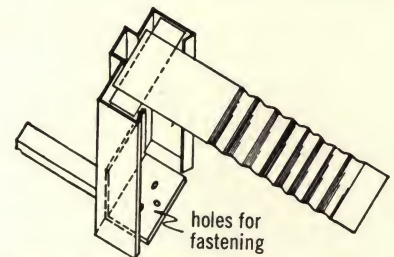
JAMB TERMINATING
AT TOP OF
TERRAZZO, CERAMIC TILE,
OR CONCRETE BASE



JAMB EXTENDS
TO OR BELOW
FINISH FLOOR LINE



ANCHORS ON LABELED FRAMES



STANDARD ANCHORS AND FASTENING

architect's specifications

custom doors

FLUSH TYPE DOORS—Shall be as manufactured by Trussbilt Division of Siems Bros., Inc., 2575 Como Avenue, St. Paul 8, Minnesota, and as indicated on drawings. Doors shall be constructed of 18 gauge full cold rolled, full pickled, stretcher leveled sheet steel with rolled truss shaped inner core of 28 gauge steel, extending full height and width of door. "Trusscore" shall be spot-welded to both face sheets of door approximately 3" on center, both horizontally and vertically. (16 or 14 gauge face sheets are also available where special conditions require them.)

NON-LABELED DOORS—Shall be insulated with standard fibre board insulation. (Corrugated chipboard, air cell asbestos, or compressed cork insulation available for special conditions.)

UNDERWRITERS' LABELED DOORS—Shall be insulated with asbestos as required by Underwriters' Laboratories, Inc.

PANEL-TYPE DOORS—Stiles, rails and panels shall be formed of 18 gauge full cold rolled, full pickled, stretcher leveled sheet steel. Stock 18 gauge mouldings shall be used for glass or metal panels. Joints at stiles and rails and at panel mouldings are to be continuously welded and ground smooth. Panel insulator shall be 1/4" chipboard for non-labeled doors and 1/4" asbestos for labeled doors. Stile and rail insulation shall be corrugated chipboard for non-labeled doors; asbestos, as required, for labeled doors.

HARDWARE—Doors shall be mortised and reinforced for hardware furnished under Builders Hardware section of this specification. Reinforcements for hinges shall be a minimum of 3/16" x 1 1/2" x 12" long. Lock front reinforcements shall be 3/16" x

1 1/4" x 4" long. Reinforcements for escutcheons or roses shall be of 14 gauge. Provide centering clips to hold lock case in alignment. Door check reinforcement shall be 12 gauge channel type 3 1/2" deep by 14" long.

Hardware items such as butts, locksets, panic devices, kickplates, push bars, push and pull plates and mortise holders are to be shipped to the door manufacturer prepaid, if required by the architect's specifications. The door manufacturer will apply these items at the factory at no additional cost.

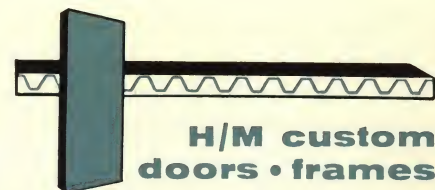
Reinforce doors only for surface items such as surface and semi-concealed closers, brackets, surface holders, transom operators, door stops, etc.

Drilling and tapping and installation of these surface items to be done in the field by others.

FINISH—All material shall be thoroughly cleaned of rust, grease and other impurities. Initial base coat shall consist of a dip coat of baked-on red oxide prime, covering inside as well as outside of door. In the process of baking, the dip coat shall provide a bond for the fibre board insulation and shall eliminate the metallic ring. Follow by metallic filler coat sanded smooth. Two (2) additional coats of baked-on red oxide prime shall then be applied.

Grained or plain enamel finish, where required, shall consist of four (4) coats of enamel, each baked-on and final coat finished to an egg shell gloss.

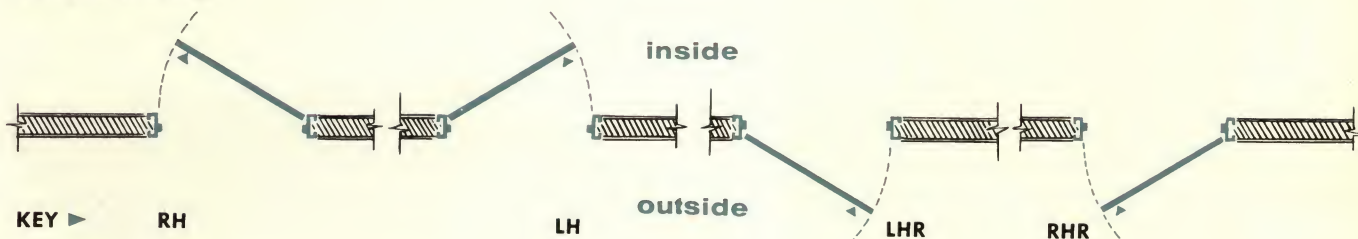
Doors shall be erected by other trades.



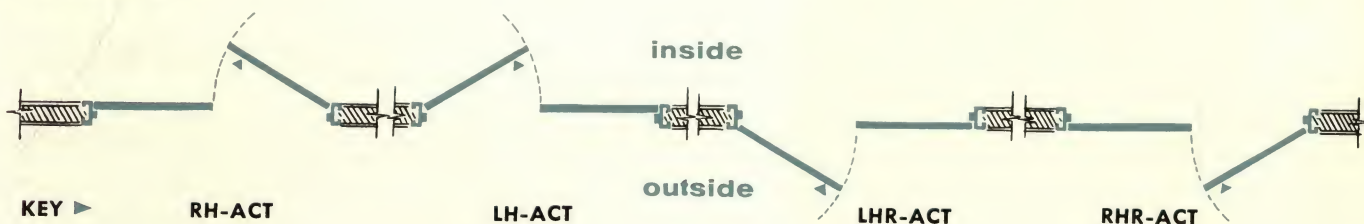
**H/M custom
doors • frames**

door swing designations

single swing



pair swing



custom frames

COMBINATION FRAMES—Shall be as manufactured by Trussbilt Division of Siems Bros., Inc., 2575 Como Avenue, St. Paul 8, Minnesota, and as indicated on drawings.

*Frames shall be formed of (state the gauge, recommended gauges will be furnished upon request) pickled and annealed steel.

The frames shall be mortised, reinforced, drilled and tapped for all mortise hardware EXCEPT that the drilling and tapping for surface door closers, door closer brackets, transom lifters and adjusters shall be done in the field by erectors.

This manufacturer will mortise or drill for door silencers as required, to be applied in the field by others.

Provide steel hinge reinforcements $\frac{3}{16}$ " x $1\frac{1}{2}$ " x 12" long and lock strike reinforcements $\frac{3}{16}$ " x $1\frac{1}{4}$ " x 4" long. Hinge and strike plate cutouts to be protected with pressed steel cover boxes spotwelded to the back of the frames behind these mortises.

Frames shall be neatly and fully mitered with the miter continuously welded its entire length and ground smooth for an invisible joint.

Provide 12 gauge angle clips at the bottom of all frames with punched holes for securing the frames to floor construction. Also provide a formed steel channel spreader at the bottom of all frames in order to avoid twisting of frames in shipment.

Provide corrugated steel anchors 24" on center.

FINISH—All material shall be given one (1) coat of baked-on

red oxide prime covering inside as well as outside surfaces.

ROUGH BUCKS—Shall be made of 10, 12 or 14 gauge steel (state gauge desired). Provide corrugated anchors 24" on center for welded up bucks. 12 gauge angle clips shall be welded to the bucks for securing to the floor. Knock down bucks shall be provided with holes punched for bolts for fastening to existing walls.

Drilling and tapping of rough bucks for securing cabinet jambs shall be done in the field by erectors.

CABINET JAMBS—Knocked down cabinet jambs shall be made of 12, 14 or 16 gauge pickled and annealed steel (state gauge desired). Intersections shall be coped. Provide holes for securing to rough bucks.

Mortising and reinforcing for hardware shall be similar to that specified for combination frames.

CASING AND SCRIBE MOULDS—Shall be made of cold drawn shapes as selected from stock profiles. Casing will be mitered, welded and ground smooth. Provide concealed fastenings or screws as required.

Scribe mouldings shall be mitered and shipped knocked down. Secured to cabinet jamb with screws.

***ARCHITECT'S NOTE:** We do not recommend the use of 18 or lighter gauge steel for door frames. For rigid construction specify a minimum of 16 gauge steel.

TRUSSBILT

door types

SIZE	REMARKS
30x80	
30x84	
36x80	for B label
36x84	specify 1-SB
42x80	
42x84	
48x80	2 pr. butts
48x84	2 pr. butts



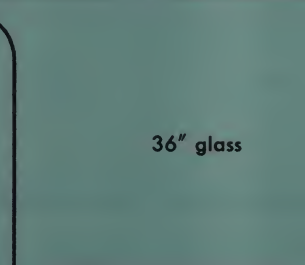
1-S

30x80	
30x84	
36x80	for
36x84	B label
42x80	specify 6-SB
42x84	



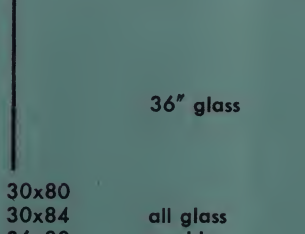
6-S

3"x33" glass



36" glass

13-S



36" glass

15-S

30x80	all glass
30x84	moulds
36x80	modern
36x84	"square"
42x80	design
42x84	

36" glass



14-S

14" louver

louvers
integral
with door
no loose
mouldings

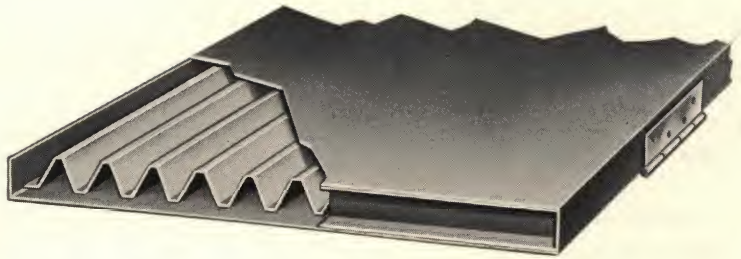


35-S

Note:
all types—either right or
left hand swing
all types—either
right or left hand
swing

hollow metal stock doors & frames

TRUSSBILT stock doors with rugged custom quality!

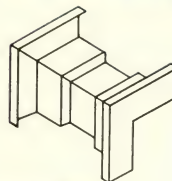


... for immediate delivery

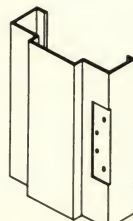
features

- ▶ finest quality hollow metal construction
- ▶ unequaled Trusscore inner-reinforcement
- ▶ 12 ga. channel check reinforcement—all doors
- ▶ two coats red oxide prime baked on
- ▶ husky $\frac{3}{16}$ " plate butt reinforcements
- ▶ sound deadened with fibreboard
- ▶ smooth flush surfaces—no seams

stock frames low cost • custom quality



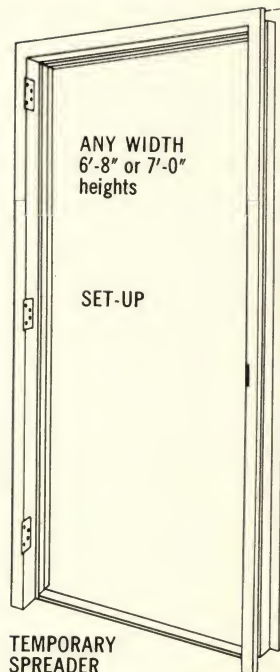
INVISIBLE
MITRE JOINT



$\frac{3}{16}$ " PLATE
HINGE REINF.



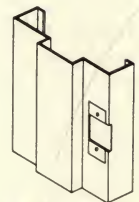
FLOOR CLIP



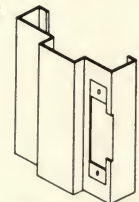
ANY WIDTH
6'-8" or 7'-0"
heights

SET-UP

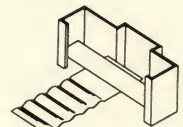
TEMPORARY
SPREADER



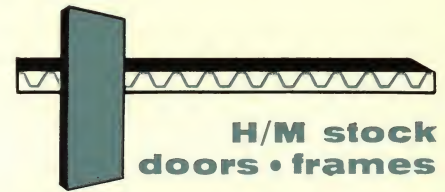
2 $\frac{3}{4}$ " SCHLAGE
TYPE STRIKE



5 $\frac{3}{4}$ " MORTISE
TYPE STRIKE



4 TYPES OF
ANCHORS



New from Trussbilt a custom quality stock door available for immediate delivery. Full Trusscore construction with 4 to 5 times more electric welds than any other steel door insures maximum strength and rigidity. A new low cost (only slightly higher than wood) makes this fine quality door competitive with the light-duty industrial steel doors

and eliminates all unsightly face seams. We further guarantee our Trusscore door to be the most rigid and heavily reinforced door in the stock door market. All doors are perfectly matched to our stock frames. If your next job requires prompt delivery and you desire trouble-free service for many years, specify Trussbilt Model "SD" doors.

hardware

CONTRACT—Hardware may be supplied by any regular hardware supplier. We carry only a minimum stock for urgent requirements and normally we suggest that hardware be furnished by others.

BUTTS—Template $4\frac{1}{2}$ x $4\frac{1}{2}$ standard weight.

LOCKS—Any lock or latch Fed. Spec. 161 with $2\frac{3}{4}$ back-set. We recommend heavy duty locks for most installations.

OTHER HARDWARE—Provision will be made for push plates, pulls mounted on plates, surface bolts, surface anti-panic devices, kickplates and surface holders.

architects' specifications • stock doors

All doors shall be Trusscore Model "SD" as manufactured by Trussbilt, 2575 Como Ave., St. Paul 8, Minnesota. Provide continuous inner reinforcement electric welded $2\frac{3}{4}$ " o.c. both vertically and horizontally to 18 ga. furniture steel face sheets. All doors shall have a flatness tolerance of $\frac{3}{32}$ " minimum. Pro-

vide U/L class "B" label doors as noted. Clean all doors and mechanically sand smooth. Paint with two coats of red oxide prime, each coat separately baked on. Hardware Reinforcements: Butts— $\frac{3}{16}$ " x $1\frac{1}{2}$ " x 12". Closers—12 ga. channel $3\frac{1}{2}$ " x 14".

Hollow metal frames for immediate delivery now available with the usual Trussbilt quality. For the first time a set-up frame with full mitre and continuous weld at no premium

in price. If early completion of your building is demanded, be sure and specify Trussbilt Type "S" frames. Matched to our new stock steel doors for perfect operating units.

hardware

Since many prefabricated sections are used, the selection of finish hardware is somewhat limited. Special hardware reinforcements can be furnished as follows: 1. Blank jambs supplied for push and pull hardware or cased openings. 2. Pairs reinforced for standard type bolts. For inactive doors. 3. Panic devices—reinforcement will be provided for surface type panic strikes and vertical rod devices only.

BUTTS—All frames cut for $4\frac{1}{2}$ x $4\frac{1}{2}$ butts.

STRIKES—2 types optional for all frames:

TYPE C STRIKE CUTOUT

Schlage A & D Series
Yale 5300-5400 Series
Corbin 400-800 Series
Russwin 200-400 Series
Sargent 6G-6U-8G-8U Series

TYPE M STRIKE CUTOUT

Corbin 7000-8000 Series
Russwin 2000
Yale 9100-9500
Lockwood 5100
Sargent 7700-7800 Series

CLOSERS—All frames reinforced for closers. Reinforcement for corner brackets where required.

architects' specifications • stock frames

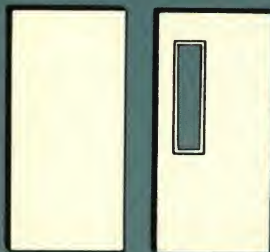
H/M frames shall be Trussbilt Type "S" of 16 gauge steel (14 gauge if required for U/L labels, etc.) with full mitres and continuous weld for an invisible joint. Butt and strike reinforcements shall be minimum of $\frac{3}{16}$ " steel plate. All frames

reinforced for closers. Provide welded temporary spreaders and anchors as required. Furnish Underwriters' Labels as noted. Protect all cutouts with mortar boxes. Provide one coat of red oxide prime and two button rubber bumpers each frame.

TRUSSBILT

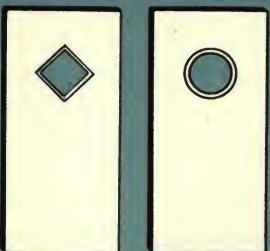
door types and labels

Approved flush type doors all $1\frac{3}{4}$ " thick. Metal panel doors $1\frac{3}{4}$ " thick available for B-C-D-E labels.



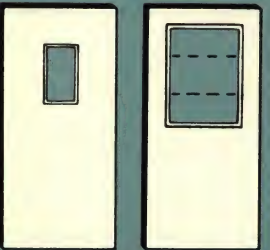
1
A-B-C-D-E

6
B-C-E



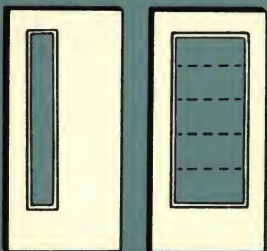
3
B-C-E

4
B-C-E



7
B-C-E

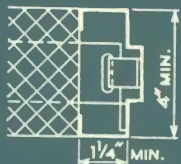
13
C-E



11
C-E

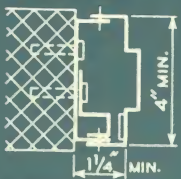
18
C-E

frames



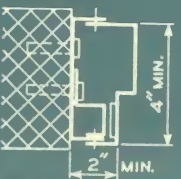
combination frames

Welded one-piece construction. Choice of plain or moulded trim. Loose trim optional. Approved for A-B-C-D-E.



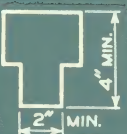
K-D two member frame

Rough buck and finished frame K-D. Loose trim optional. Approved for A-B-C-D-E.



slip-in two member frame

Rough buck K-D. Finished frame welded one-piece construction. Loose trim optional. Approved for A-B-C-D-E.



removable mullion

(for use with combination frames) Minimum 16 gauge steel. Maximum height 8'-0". Approved for B-C-D-E.



transom bar

Minimum 16 gauge steel. C label maximum glass area of 1296 sq. in. each light. E label maximum glass area of 720 sq. in. each light. Stopped glass or H/M sash optional. Approved for C-E.

underwriters' approved hollow metal doors & frames

classifications*

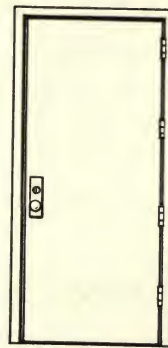
- A label (3-hour)—fire division walls, transformer vaults, etc.
- B label (1½-hour)—stair shafts, boiler rooms, machine rooms, vertical shafts
- C label (¾-hour)—corridor and room partitions
- D label (1½-hour)—severe exterior exposure
- E label (¾-hour)—fire escape exposure

* Location and classifications subject to state and local codes.

3-hour A label door

SAVE \$100.00, or MORE,
on TRUSSBILT A LABEL (3-hour)
HOLLOW METAL FIRE DOORS

- Any approved single-point lock with $\frac{3}{4}$ " throw
- Fusible link door closer
- Standard steel butt hinges for doors up to and including 3'-0" x 7'-0"



gauges and sizes

A label

Minimum 14 gauge steel.

Maximum size—

single 4'-0"x8'-0";

pair 8'-0"x10'-0".

Frame stop height— $\frac{3}{4}$ "

B-C-D-E label

Maximum size—

16 gauge steel

single 3'-6"x7'-6"

pair 5'-0"x7'-6"

14 gauge steel

single 4'-0"x10'-0"

pair 8'-0"x10'-0"

Frame stop height— $\frac{3}{8}$ "

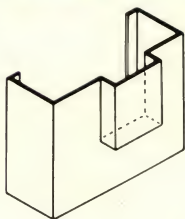
No longer necessary to specify cumbersome, expensive, three-point locking devices.

Now available, for the first time, A label (3-hour) hollow metal fire doors with approved one-point locks with $\frac{3}{4}$ " throw.

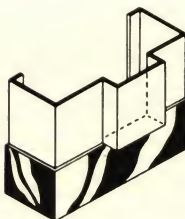
Single flush-type doors only, sizes to 4'-0" x 8'-0".

Approved by Underwriters' Laboratories.

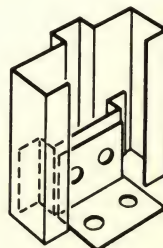
base and frame details



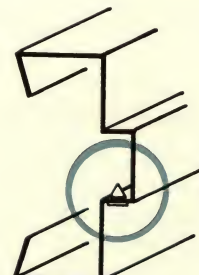
JAMB TERMINATING AT TOP OF
TERRAZZO, CERAMIC TILE,
OR CONCRETE BASE



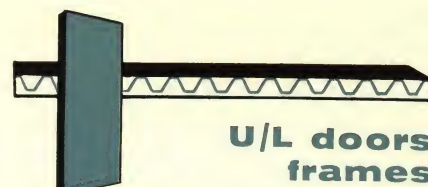
STAINLESS STEEL SPATS
WRAPPED AROUND FRAME



ADJUSTABLE
FLOOR CLIPS



RUBBER SILENCERS
ON H/M FRAMES

U/L doors
frames

door and hardware requirements

single A (3-hour)

Maximum size—4'-0" x 8'-0". Minimum 18 gauge steel.
Hardware requirement—

BUTTS—Steel minimum 4½" high, regular weight, for doors 36" or less wide. Extra heavy for doors over 36" wide. One butt required for each 30" of door height.

LOCKS—Approved single-point, mortise or cylindrical with ¾" throw, or approved 3-point lock.

DOOR CLOSER—Recommended hold-open type with fusible link (optional).

pair A (3-hour)

Maximum opening size—8'-0" x 10'-0". Minimum 18 gauge steel.

Hardware requirement—

BUTTS—Steel minimum 4½" high, regular weight, for doors 36" or less wide. Extra heavy for doors over 36" wide. One butt required for each 30" of door height.

LOCKS—Active door, approved 3-point lock.
Inactive door, approved 2-point lock.

DOOR CLOSER—Recommended hold-open type with fusible link (optional).

ASTRAGALS—Required for each door.

single and pair • B (1½-hour) • C (¾-hour) • D (1½-hour) • E (¾-hour)

Maximum opening size—single 4'-0" x 10'-0"; pair 8'-0" x 10'-0".

Steel gauge—flush type 18, 16 and 14 gauge; panel type 18 gauge only.

Maximum exposed wire glass area—

B label—single opening 100 sq. in. with no dimension exceeding 12" except type 6. Maximum height 33". Pairs of doors 50 sq. in. per door.

C label—1296 sq. in. each light. Muntin bars optional.

D label—No glass.

E label—720 sq. in. each light. Muntin bars optional.

Approved glass mouldings must be used. Pairs of doors to have astragal one side.

Hardware requirements—

BUTTS—4½" regular weight steel, one for each 30" of height.

LOCKS—Knob latch, lock or panic device. Pairs must have ¾" bolt throw. Doors exceeding 8'-0" in height to have 3-point lock. Inactive door of pairs to have top and bottom bolts or panic device.

DOOR CLOSER—Rixson floor hinge with mortised pivots permitted.

Spring hinges, push-pulls, deadlocks not permitted.

important notes

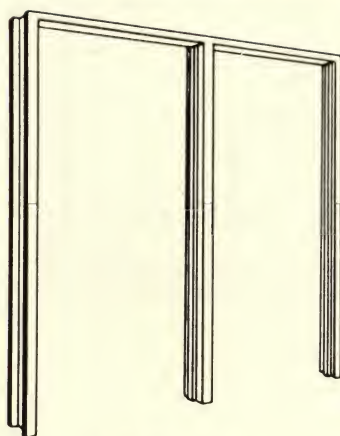
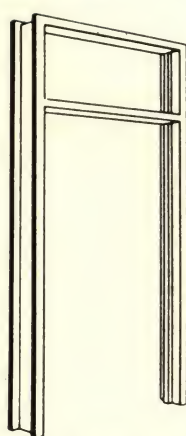
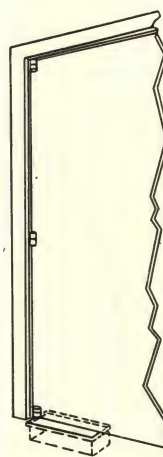
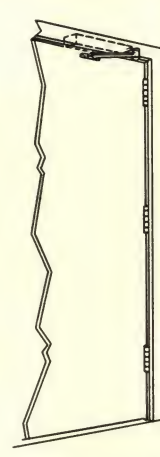
1. Cutting and closing of frame stops at 45° or 90° approved.
2. Standard rubber bumpers and mutes approved.
3. Hospital type extensions for terrazzo base approved.
4. Stainless steel spats 6" high of 20 gauge (max.) approved.
5. Adjustable floor clips approved.
6. Double door frames with removable mullions approved.

7. Frames with transoms (class C and E only) approved.
8. Use of uni-check and pivots approved.
9. Concealed closers in frames or transom bar approved.
10. Approved type anchors must be furnished. Two required for first 60" of height and one additional for each 30" of height or fraction thereof.

NOT PERMITTED

1. Stainless steel or aluminum frames.
2. Frames bolted into masonry or in stud walls, plaster partitions.

frames • closers • hinges

U/L FRAMES
WITH MULLIONSU/L FRAMES
WITH TRANSOMSFLOOR HUNG ON
FLOOR CHECK AND PIVOTSCLOSER CONCEALED
IN FRAME HEAD

TRUSSBILT

door types



FP1



FP2



FP3



FP4



FP5



FP7



FP8



FP10



FP11



FP13



FP17



FP23

hollow metal prison and detention doors



Original, medium security prison, Soledad, California

Architect: State of California, Department of Public Works, Division of Architecture

Contractor: M and K Corporation

For over seventeen years TRUSSBILT has furnished prison and detention type Hollow Metal doors and frames for many installations.

The TRUSSCORE flush type door has been approved by the Federal Bureau of Prisons as well as many noted prison architects for use in maximum security prisons, medium detention homes and hospitals.

The prison illustrated above has a medium security installation. The door installation detailed on the opposite page is for a maximum security situation.

For further information and details, we offer to you our many years of experience; our able engineering staff is at your service.

representative jobs of recent TRUSSBILT security installations

United States Government Maximum Security Disciplinary Barracks • Camp Cooke, California

State of California Medium Security Prison • Soledad, California

State of Ohio Training School • Marion, Ohio

State Institution for Defective Delinquents • Luzerne, Pennsylvania

Illinois Youth Commission Diagnostic Center • Joliet, Illinois

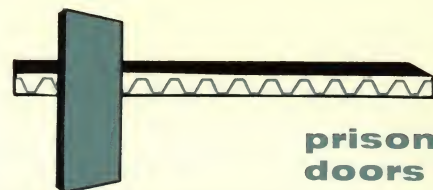
Chester County Prison Farm • Philadelphia, Pennsylvania

Ohio Correctional Institution • Lebanon, Ohio

Courthouse and Jail • San Diego, California

Connecticut State Prison • Enfield, Connecticut

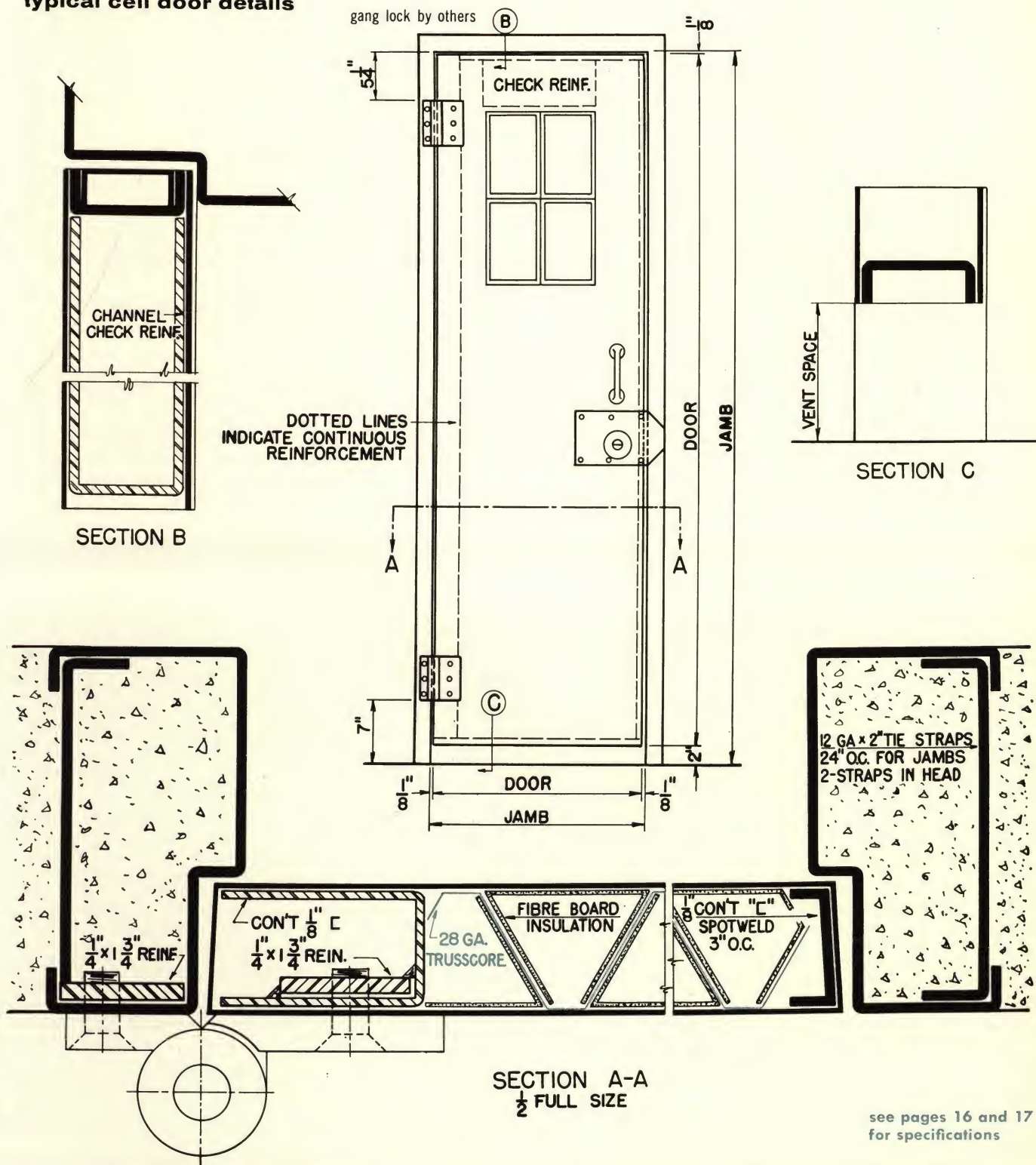
Juvenile Youth Study Center • New Orleans, Louisiana



prison
doors

prison and detention doors

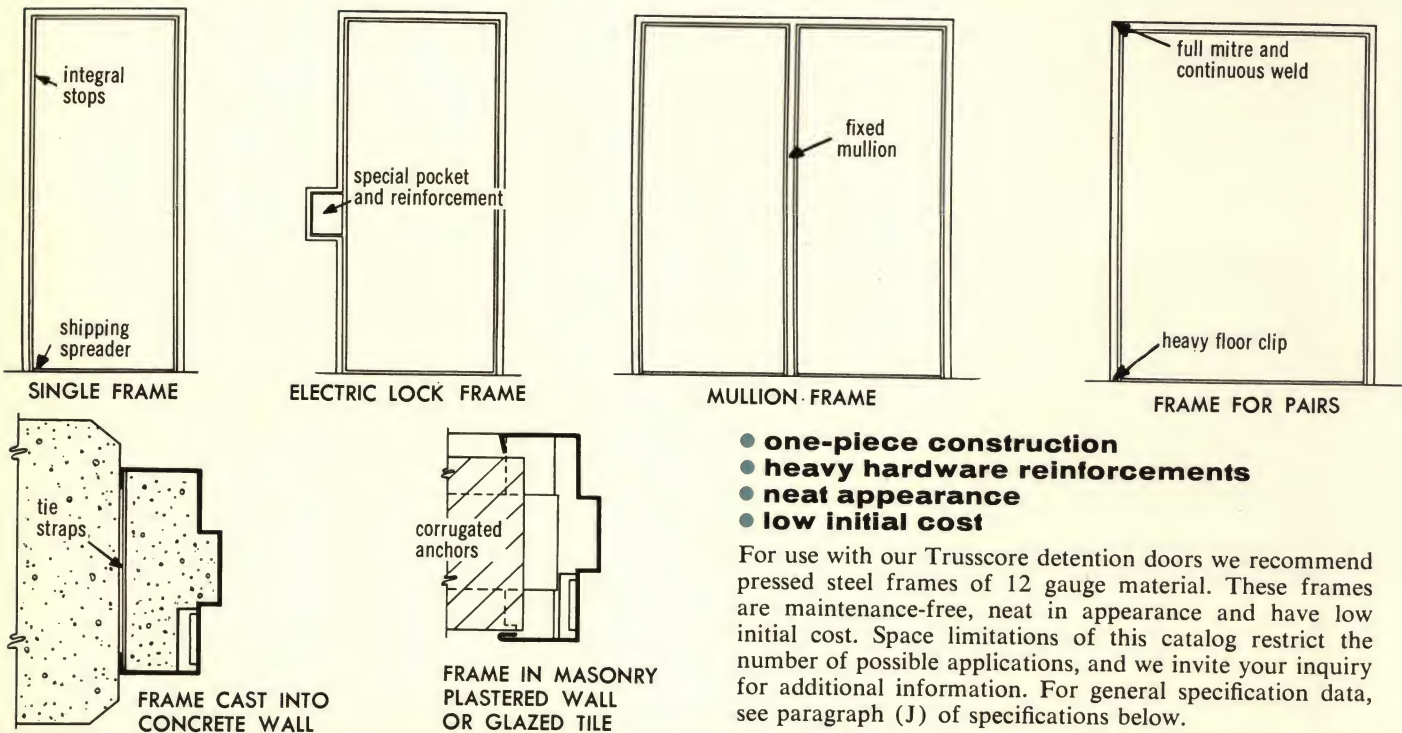
typical cell door details



TRUSSBILT

hollow metal prison and detention doors

pressed steel frames



- one-piece construction
- heavy hardware reinforcements
- neat appearance
- low initial cost

For use with our Trusscore detention doors we recommend pressed steel frames of 12 gauge material. These frames are maintenance-free, neat in appearance and have low initial cost. Space limitations of this catalog restrict the number of possible applications, and we invite your inquiry for additional information. For general specification data, see paragraph (J) of specifications below.

architects' specifications

(A) Where required by plans, all pressed steel frames and doors set up for prison locks shall be prison doors as manufactured by Trussbilt Division of Siems Bros., Inc., 2575 Como Ave., St. Paul 8, Minnesota.

(B) **GENERAL**—Prison doors shall be approximately 2" thick to receive prison locks. Edges at top and sides shall finish flush. Doors shall have not more than $\frac{1}{8}$ " clearance at sides and top and shall have proper bevel to operate without binding. Accurately mortise and reinforce prison doors for application of hardware and prison equipment items.

(C) **DOOR CONSTRUCTION**—Prison doors shall have face sheets of 14-gauge furniture steel with Trussbilt continuous inner-reinforcement (Trusscore) full width and height of door.

Inner-reinforcement shall be a true truss design with triangular form whose shape cannot alter without changing the length of the sides. Flat apexes of inner-reinforcement shall be electric spot welded to face sheets $2\frac{3}{4}$ " o.c. both vertically and horizontally across entire surface of door. Each flute of inner-reinforcement to receive a special fibreboard sound deadener—paint impregnated to become an integral part of door.

(Where an open type specification is required, the following door construction is to be considered a minimum equal to the continuous inner-reinforcement of Trussbilt doors:) Where continuous inner-reinforcement construction as described above is not furnished, only the following door construction will be considered: Face sheets 12-gauge furniture steel with vertical reinforcements of 10-gauge channels spaced 4" o.c. spot welded 3" o.c. vertically. Channels shall run full height of door and

have 1" legs. Spaces between channels shall have air-cell asbestos insulation solidly filling all voids.

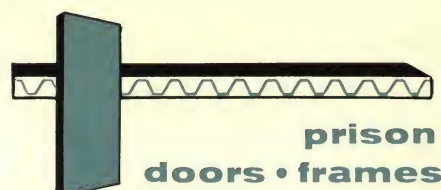
(D) **PRISON DOOR REINFORCEMENTS**—Provide internally $\frac{1}{8}$ " steel channel banding around complete door perimeter, spot welded to face sheets 3" o.c. The butt reinforcing channel shall receive an additional backup reinforcement of $\frac{3}{16}$ " plate, arc welded in place, all properly drilled and tapped to receive screws. The lock channel shall not be cut except for passage of lock bolt. Pull reinforcement shall be $\frac{3}{8}$ " x 2" x 12", closer reinforcement one-piece channel 12-gauge x $3\frac{1}{2}$ " x 14".

(E) **PRISON LOCK POCKET**—A special pocket shall be built into door where prison locks are used. Detention side of door shall finish flush with a $\frac{3}{16}$ " backup plate to protect lock. Backup plate shall be drilled and tapped to receive lock which shall be factory installed with 4 F.H. or twist-off bolts. Provision shall be made so it is impossible for removal of lock when bolt is in extended (locked) position. Lock coverplates shall be provided and factory installed after lock is in place. Coverplate shall be $\frac{3}{16}$ " steel plate, extending at least $\frac{3}{4}$ " beyond cutout on all edges. Plate shall have extended offset lip to lap over jamb and protect lock bolt. Plate shall have all edges neatly beveled and fastened to door with 6 twist-off head security bolts. Finish coverplate to match door finish.

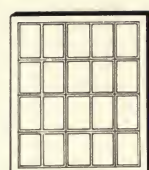
(F) **PRISON DOOR FENESTRATION**—

Standard Vision—Vision openings shall be provided where required. See plans for size. Solid bar glazing bead with spanner-head screws shall be provided.

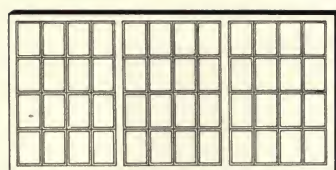
Multiple Glass Lights—Doors where indicated by plans shall be equipped with special guard inserts. Opening in door shall be



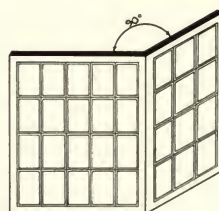
pressed steel relite frames



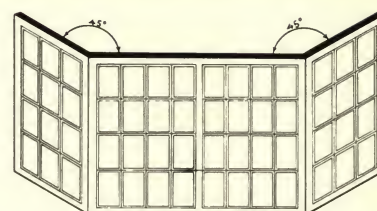
SINGLE



TRIPLE



CORNER VIEW



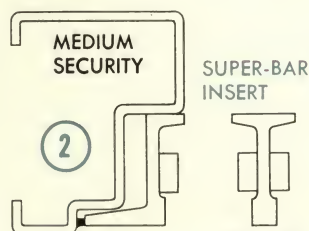
CORRIDOR VIEW

MINIMUM
SECURITY

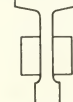
①

INTER-BAR
INSERT *

MUNTIN

MEDIUM
SECURITY

②

SUPER-BAR
INSERT

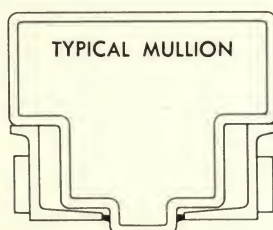
MUNTIN

MAXIMUM
SECURITY

③

SUPER-RESISTANT
INSERT

MUNTIN



TYPICAL MULLION

tool
resisting
bar

• three distinct classes of security available

The use of pressed steel relite frames in detention institutions is considered a necessity. Relites offer a full, unobstructed view of any security area without endangering personnel to attack from inmates and in many areas allow for visual inspection without the opening of critical security doors. Relites come complete with factory built-in security sash with a common glass-size module of 6" x 9". For specification data covering security sash, please refer to paragraph (F) Prison Door Fenestration of specifications below.

Note: Glazing bars occur on non-detention side—always.

*see specifications below

framed with a steel channel (same gauge as door) around perimeter of insert and spot welded 3" o.c. Inserts shall be continuously arc welded into door construction on both sides and welds ground smooth on a 45° angle.

Guard Inserts—Shall be supplied by door manufacturer as required by plans. Muntin spacing shall be a common glass size module of 6" x 9" with solid bar glazing beads complete with spanner-head screws.

Minimum Security Inserts—"INTER-BAR" Inserts—(All doors unless otherwise noted) section 1½", glazing rabbet ⅝", frame weight 1.27 lb., muntin weight 1.0 lb., frame and muntins tenoned and riveted.

Medium Security Inserts—"SUPER-BAR" Inserts—Section 1¾", glazing rabbet ¾", frame weight 2.0 lb., muntin weight 1.9 lb., frame and muntins tenoned, riveted and arc welded. Welds may not project more than ¼" and shall not be ground.

Maximum Security Inserts—"SUPER-RESISTANT" Inserts—Section 1¾", glazing rabbet ¾", frame weight 2.0 lb., muntin 1.9 lb., frame and muntins tenoned, riveted and arc welded. Welds may not project more than ¼" and shall not be ground. Tool-resisting bar of ¼ sq. in. area, composed of 12 high carbon-chrome steel inserts, embedded in a low carbon steel matrix, then heat treated, shall be welded to inside face of all vertical and to web of all horizontal muntins with 1" welds spaced 9" o.c.

(G) FACTORY HARDWARE APPLICATION—This manufacturer shall factory install following hardware and prison equipment which shall be "prepaid" by others for delivery at door plant. Prison locks and deadbolts, protection plates, pulls, push plates,

hangers, door guides, kickplates, butts, cremone bolts, key escutcheons, head and foot bolts. Also, where limit switches are used or electric locks are used for pairs of doors, door supplier shall factory build in doors all boxes and conduit to receive wiring furnished by others. Balance of hardware and prison equipment to be field installed by other trades.

(H) FACTORY PRIME—Each door shall be automatically pressure sanded on both sides to remove blemishes and foreign matter, also to serve as grip for paint. Completely dip door in red oxide prime so interior of door is completely coated with primer. Spot glaze with metallic filler to smooth any irregularities and sand smooth. Follow with two spray coats of red or gray primer, each coat baked on.

(J) PRESSED STEEL FRAMES—Where indicated by plans, provide pressed steel frames of 12-gauge pickled and annealed steel. Frames shall be fully mitred at corners and continuously welded on backside of mitre—at all points. For butts, provide a continuous ⅜" plate reinforcement, 1½" wide by full height, drilled and tapped. Factory install lock bolt keepers which will be "prepaid" to frame plant. Protect all mortises with pressed steel boxes. Provide 12-gauge angle floor clips at bottom of frame with holes for securing to floor. Also provide a temporary channel type spreader welded to bottom of frame. Where electric locks are mounted in frame, provide special housing with ⅜" backup for attachment of lock. Frames shall receive one coat of red oxide prime baked on.

NOTE: For specification data covering Standard Hollow Metal Doors and Frames, see pages 8 and 9 of this catalog.

TRUSSBILT

Illustrations on these pages are current examples of Trussbilt's window wall system. Each installation proves that it is possible to design a tight and leak-proof window wall, beautiful in appearance and economical in price.

With steel you have complete freedom of design and a full range of color selections including today's new miracle finishes.

We are in a position to contract for the complete requirement including framing, metal panels, porcelain enamel, vent sash, etc.

Write for full particulars of construction.

window walls • curtain walls

... custom fabricated of durable steel



1. St. Michael School • Morgan, Minnesota



2. Southwest Junior High School • Albert Lea, Minnesota



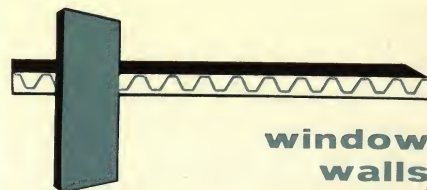
4. Golden Valley Civic Center • Golden Valley, Minnesota

architects

1. A. J. Ross & Associates
Mankato, Minnesota
2. Hammel & Green, Inc.
St. Paul, Minnesota
3. Hammel & Green, Inc.
St. Paul, Minnesota
4. Patch & Erickson, Inc.
Minneapolis, Minnesota
5. Patch & Erickson, Inc.
Minneapolis, Minnesota
6. Patch & Erickson, Inc.
Minneapolis, Minnesota
7. E. D. Corwin & Associates
St. Paul, Minnesota
8. A. J. Ross & Associates
Mankato, Minnesota
9. Ellerbe & Company
St. Paul, Minnesota



7. Arlington Hills Presbyterian Church • St. Paul, Minnesota



window
walls



3. Southwest Junior High School • Albert Lea, Minnesota



5. Golden Valley Civic Center



6. Minnehaha Lutheran Church—Educational Center • Minneapolis, Minnesota



8. Sacred Heart High School • Waseca, Minnesota



9. Trussbilt Home Office • St. Paul, Minnesota

TRUSSBILT

representatives

state	city	write	call
Alabama	Birmingham (4)	Oscar M. Price, Jr., 1026 No. 19th St.	FA 2-1028
California	Glendale (4) San Diego (3) San Francisco (5)	Engineered Metals of S. Cal., 437 Fernando Court Albert J. Ehlers, 3525 Fifth Ave. Boris Kitchin, 53 Stevenson St.	CH 5-2614 CY 5-7294 GA 1-7087
Colorado	Denver (2)	Colorado Bldrs. Supply Co., 1534 Blake St.	AC 2-3851
Florida	Jacksonville	Aichel Steel & Supply Co., 2205 Edison Ave.	EL 5-6535
Georgia	Atlanta (3)	Industrial Equip. Co., 78 Baker St., N. W.	JA 2-2615
Illinois	Chicago (6) Moline	Branch Nicoloff Co., 549 W. Washington Blvd. Builders Sales & Service Co., 202—34th St.	RA 6-5057 MO 4-7445
Indiana	Fort Wayne (2) Gary (8) Indianapolis (6)	Jones Engineering Products Co., 3416 Fairfield Gary Gen. Equip. Co., Inc., 2727 W. 9th Ave. Holliday Steel Warehouse, 545 W. McCarty St.	HA 4131 TU 5-5578 ME 1-8311
Iowa	Des Moines (10) Sioux City Waterloo	Swanson Sales, Inc., 2737 Douglas Ave. Burke Eng. Sales Co., 2210 E. 4th St. Pinkerton Bldg. Supplies, 302½ W. 4th	CR 9-9793 5-5091 AD 3-3361
Kansas	Wichita (1)	Chester L. Anderson Co., Inc., 700 So. Emporia	HO 4-9354
Kentucky	Louisville (1)	Atlas Plaster & Supply Co., 2932 Greenwood	SP 6-4621
Michigan	Grand Rapids (7) Lansing (2) Marquette	Steele Bros. & Todd, 1050 Cottage Grove S. E. Payne-Rosso Company, 2211 W. St. Joseph St. C. T. DeHaas Company, Washington St.	CH 5-0416 IV 44547-48 CA 6-6515
Minnesota	St. Paul (8)	Trussbilt, 2575 Como Ave.	MI 6-7181
Missouri	Kansas City (11)	Edelman-Lyon Co., 4303 Main St.	VA 1-4340
Montana	Billings Great Falls	Montana Steel & Supply Co., 714—6th Ave. No. Montana Steel & Supply Co., 1107 Central Ave. W.	9-3639 GL 2-2011
Nebraska	Omaha (10)	Trustin-Carlson & Assoc., 2300 N. 18th St.	AT 4586
New Mexico	Albuquerque	Cobusco Steel Products, 2001 E. Gold Ave.	CH 3-2291
New York	Rochester (7)	The Maurer Co., Inc., 31 Richmond St.	HA 6-0030
North Dakota	St. Paul (8), Minn.	Trussbilt, 2575 Como Ave.	MI 6-7181
Ohio	Cleveland (28)	Hope Products Co., 15812 Miles Ave.	LO 1-3363
Oklahoma	Oklahoma City (5) Tulsa (19)	Murray R. Womble Co., 121 N. E. 26th St. Murray R. Womble Co., 216 East 16th St.	JA 5-7417 LU 4-2414
Pennsylvania	Upper Darby	MacKay & Walls, Inc., 60 Sherbrook Blvd.	CL 9-5666
South Dakota	St. Paul (8), Minn.	Trussbilt, 2575 Como Ave.	MI 6-7181
Tennessee	Johnson City Knoxville (1) Nashville	Lancaster Assoc., John Sevier Hotel Bldg. Lancaster Assoc., Andrew Jackson Hotel Bldg. Vernon S. Tupper Co., 206 Tuck Bldg.	3200 4-4623 AL 4-6559
Texas	Dallas (1) San Antonio (1)	J. L. O'Hearn, 809 Wilson Bldg. Kirby Bldg. Specialties, 3504 Bandera Rd.	RI 2-2306 PE 3-8169
Utah	Salt Lake City (4)	Cobusco Steel Products, 660 W. So. Temple	EM 4-8481
Washington	Seattle (1) Spokane (4)	Bradley-Zesbaugh, Inc., 505—White-Henry-Stuart Bldg. Brant-Bernhard Corp., 34 W. 2nd Ave.	MA 4-1570 RI 7-2081
Wisconsin	Green Bay Milwaukee (3)	La Force Builders Hardware, 347 S. Washington Phillip Gross Hdwe. Co., 174 W. Wisconsin Ave.	HE 7-0541 BR 1-2929
Wyoming	Casper	Colorado Bldrs. Sup. Co., 2100 E. Yellowstone Highway	3-3785

PRINTED IN U.S.A.

TRUSSBILT

Division of Siems Bros Inc.

2575 COMO AVENUE • ST. PAUL 8, MINNESOTA • Midway 6-7181

Digitized by:



ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:

Carol J. Dyson, AIA